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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,995	01/14/2004	William H. Fulton	102434-200	3727

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WIGGIN AND DANA LLP  
ATTENTION: PATENT DOCKETING  
ONE CENTURY TOWER, P.O. BOX 1832  
NEW HAVEN, CT 06508-1832

EXAMINER
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KARLS, SHAY LYNN

ART UNIT	PAPER NUMBER
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1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/756,995

Applicant(s)

FULTON ET AL.

Examiner

Shay L. Karls

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/4/06 has been entered.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, 3, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahiko (JP 2002177895).**

With regards to claim 1, Masahiko teaches a cleaning device comprising a first holding plate (48) for holding and securing probes assemblies. The cleaning cartridge (24) having an upper surface, a chamber (24), a cleaning solution and an absorbent pad (60). The absorbent pad is located within the chamber and the pad is saturated with cleaning solution (NaOH, ZnCl<sub>2</sub>, figure 3). There is a means for securing and aligning (42, 44, 46, 54, 56) the cleaning cartridge in proximity to the probe head assembly. The cleaning cartridge is configured such that the upper surface of the cleaning cartridge and the top surface of the absorbent pad are offset from one another by a predetermined distance that is greater than zero (figure 3 shows the distance

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between the top of the pad and the upper surface of the cartridge). The predetermined distance defines a depth that the probe pins penetrate the pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. Since the probe head assembly is not positively claimed, any probe head assembly could be used that would function in the manner as claimed.

With regards to claim 2, the first holding plate (48) is affixed to the second holding plate (44, 54) so as to be rotated into alignment with the second holding plate (the second holding plate comprises a screw-type element, which is rotated to ensure a connection between the first and second plates since the screw keeps the two plates affixed together).

With regards to claim 3, the first and second holding plates and the cleaning cartridge are made from a chemically inert material since no chemical reaction occurs between the elements.

With regards to claim 8, the means for securing and aligning includes a clamp (54, 56) extending from the first holding plate (48) and a second holding plate (44, 54) includes a hole for receiving the clamp (as clamp is turned and the screw portion of the clamp extends through the hole in the second plate (54) causing the first holding plate to be moved vertically) (figure 1 and 2).

With regards to claim 9, the means for securing and aligning includes a guide (46) extending from the first holding plate (48) and a second holding plate (44) includes a slot for receiving the guide (46 fits within a slot on 44, the guide and the slot allow for vertical movement of the first plate) (figure 1 and 2).

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**Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (USPN 6199238).**

With regards to claim 1, Huang teaches a cleaning device comprising a first holding plate (50) for holding and securing disks. The cleaning cartridge (621) having an upper surface, a chamber (622), a cleaning solution (col. 2, lines 64-67 and col. 3, lines 1-13) and an absorbent pad (630). The absorbent pad is located within the chamber and the pad is saturated with cleaning solution. There is a means for securing and aligning (262) the cleaning cartridge in proximity to the disks. The cleaning cartridge is configured such that the upper surface of the cleaning cartridge and the top surface of the absorbent pad are offset from one another by a predetermined distance that is greater than zero (figure 5 shows that the upper surface of the cartridge is located below the top surface of the pad). The predetermined distance defines a depth that the probe pins (if used for the intended use) penetrate the pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. Since the probe head assembly is not positively claimed, any probe head assembly could be used that would function in the manner as claimed.

With regards to claim 5, there is a cover (21) that is removable and reusable.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko as applied to claim 3 above.**

Masahiko teach all the essential elements of the claimed invention however fails to teach that the chemically inert material used is polyvinylchloride. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polyvinylchloride for the first and second holding plates as well as the cleaning cartridge, since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.

Additionally, polyvinylchloride would have been a good material to use since it has a high strength, dimensional stability and can be easily machined, heat formed, welded or solvent cemented (San Diego Plastics).

**Claim 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiko as applied to claim 1 above over DeForest et al. (USPN 5240339).**

Masahiko teaches all the essential elements of the claim however fail to teach that the cleaning cartridge includes a removable and reusable cover (claim 5) or a cover with a safety recess (claim 7). DeForest teaches a fluid saturated sponge (22) applicator with a cover (32). It

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would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Masahiko so that the absorbent pad and cleaning cartridge comprises a cover as taught by DeForest so that when the pad is not in use, the cover can be attached to the cartridge and the absorbent pad will not dry out and the cover will prevent contamination (col. 4, lines 29-33) of the pad. While DeForest does not teach using cover with a safety recess, it would have been obvious to one of ordinary skill in the art to use a cover with a safety recess so that in the event that the cover is not removed from the cartridge during a cleaning process, the probe pins will not be damaged.

#### *Response to Arguments*

Applicant's arguments, filed 10/4/06, with respect to Baker have been fully considered and are persuasive. The rejection of Baker has been withdrawn.

Applicant's arguments filed 10/4/06, with respect to Masahiko and Huang have been fully considered but they are not persuasive.

The applicant argues that none of the references teach that the predetermined distance defines a depth that the probe pin penetrate the absorbent pad when a surface of the probe head assembly is brought into contact with the upper surface of the cleaning cartridge. The probe head assembly is not positively recited within the claim, and therefore, one of skill would use a probe head assembly that would function in the manner as claimed. Additionally, it is noted that while the applicant is intending the present invention to be used for probe cleaning, the actual probes head assemblies are not claimed. Therefore, all limitations regarding how the probe head assemblies are used are intended use limitations. The claim language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the

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claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since the prior art of Masahiko and Huang are capable of performing the intended use given an appropriate probe head assembly, the references meet the claimed invention. For example, if the probe assembly head was an inverted U-shape with a probe pin located inside and extending outwardly, the head would be able to contact the upper surface of the cartridge of Huang and the probe pin would contact the pad and penetrate a predetermined distance based on the contact between the cartridge and the head. Additionally, if the probe head assembly was shaped so that a portion was thicker and the thicker portion comprised the pins, the head could be placed in contact with the upper surface of the cartridge of Masahiko and the pins would be allowed to penetrate a predetermined distance.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be 'Slk' or similar, written in a cursive style.

Slk  
12/21/06